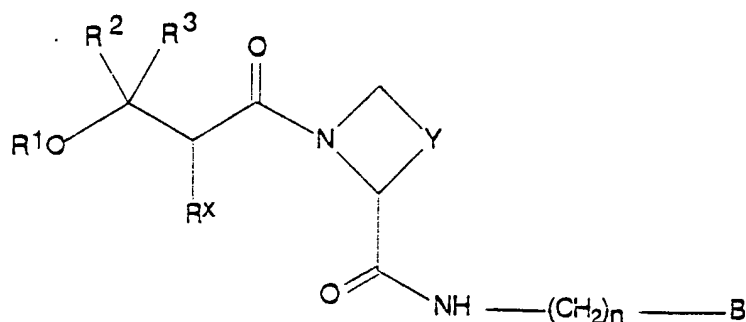


VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

1. (Amended) A compound of formula I,



wherein

R<sup>1</sup> represents H, C(O)R<sup>11</sup>, SiR<sup>12</sup>R<sup>13</sup>R<sup>14</sup> or C<sub>1-6</sub> alkyl which latter group is optionally substituted or terminated by one or more substituent selected from OR<sup>15</sup> or (CH<sub>2</sub>)<sub>q</sub>R<sup>16</sup>;

R<sup>12</sup>, R<sup>13</sup> and R<sup>14</sup> independently represent H, phenyl or C<sub>1-6</sub> alkyl;

R<sup>16</sup> represents C<sub>1-4</sub> alkyl, phenyl, OH, C(O)OR<sup>17</sup> or C(O)N(H)R<sup>18</sup>;

R<sup>18</sup> represents H, C<sub>1-4</sub> alkyl or CH<sub>2</sub>C(O)OR<sup>19</sup>;

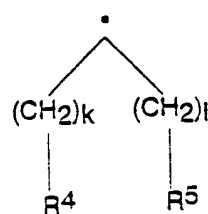
R<sup>15</sup> and R<sup>17</sup> independently represent H, C<sub>1-6</sub> alkyl or C<sub>7-9</sub> alkylphenyl;

R<sup>11</sup> and R<sup>19</sup> independently represent H or C<sub>1-4</sub> alkyl; and

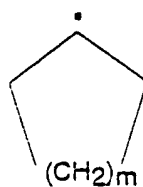
q represents 0, 1 or 2;

R<sup>2</sup> and R<sup>3</sup> independently represent H, C<sub>1-4</sub> alkyl, cyclohexyl or phenyl;

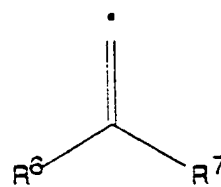
R<sup>x</sup> represents a structural fragment of formula IIa, IIb or IIc,



IIa



IIb



IIc

wherein

k, l and m independently represent 0, 1, 2, 3 or 4;

$R^4$  and  $R^5$  independently represent H,  $\text{Si}(\text{Me})_3$ , 1- or 2-naphthyl, a polycyclic hydrocarbyl group,  $\text{CHR}^{41}\text{R}^{42}$  or  $\text{C}_{1-4}$  alkyl (which latter group is optionally substituted by one or more fluorine atoms), or  $\text{C}_{3-8}$  cycloalkyl phenyl, methylenedioxyphenyl, benzodioxanyl, benzofuranyl, dihydrobenzofuranyl, benzothiazolyl, benzoxazolyl, benzimidazolyl, coumaranonyl, coumarinyl or dihydrocoumarinyl (which latter twelve groups are optionally substituted by one or more of  $\text{C}_{1-4}$  alkyl (which latter group is optionally substituted by one or more halo substituent),  $\text{C}_{1-4}$  alkoxy, halo, hydroxy, cyano, nitro,  $\text{SO}_2\text{NH}_2$ ,  $\text{C}(\text{O})\text{OH}$  or  $\text{N}(\text{H})\text{R}^{43}$ );

$\text{R}^{41}$  and  $\text{R}^{42}$  independently represent cyclohexyl or phenyl;

$\text{R}^6$  and  $\text{R}^7$  independently represent H,  $\text{C}_{1-4}$  alkyl,  $\text{C}_{3-8}$  cycloalkyl, phenyl (which latter group is optionally substituted by one or more of  $\text{C}_{1-4}$  alkyl (which latter group is optionally substituted by one or more halo substituent),  $\text{C}_{1-4}$  alkoxy, halo, hydroxy, cyano, nitro,  $\text{SO}_2\text{NH}_2$ ,  $\text{C}(\text{O})\text{OH}$  or  $\text{N}(\text{H})\text{R}^{44}$ ) or together

with the carbon atom to which they are attached form a  $C_{3-8}$  cycloalkyl ring;

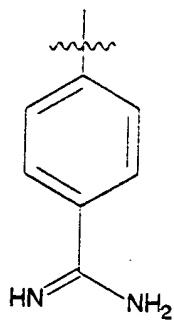
$R^{43}$  and  $R^{44}$  independently represent H or  $C(O)R^{45}$ ; and

$R^{45}$  represents H,  $C_{1-4}$  alkyl or  $C_{1-4}$  alkoxy;

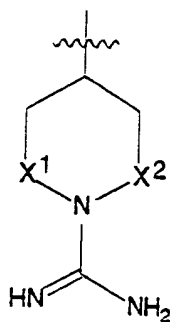
Y represents  $[CH_2]$ ,  $(CH_2)_2$ ,  $CH=CH$ ,  $(CH_2)_3$ ,  $CH_2CH=CH$  or  $CH=CHCH_2$ ,  
which latter three groups are optionally substituted by  $C_{1-4}$  alkyl, methylene, oxo  
or hydroxy;

n represents 0, 1, 2, 3 or 4; and

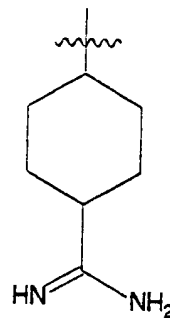
B represents a structural fragment of formula IVa, IVb or IVc



IVa



IVb



IVc

wherein

X<sup>1</sup> and X<sup>2</sup> independently represents a single bond or CH<sub>2</sub>;

or a pharmaceutically acceptable salt thereof.

3. (Amended) A compound of formula I, as defined in Claim 1 [or Claim 2], wherein R<sup>1</sup> represents optionally substituted C<sub>1-6</sub> alkyl or H.

5. (Amended) A compound of formula I, as defined in [any one of the preceding claims] claim 1, wherein R<sup>x</sup> represents a structural fragment of formula IIa.

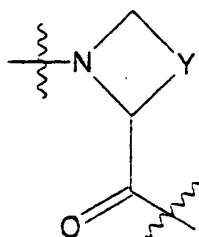
6. (Amended) A compound of formula I, as defined in [any one of the preceding claims] claim 1, wherein Y represents [CH<sub>2</sub> or] (CH<sub>2</sub>)<sub>2</sub>.

7. (Amended) A compound of formula I, as defined in Claim 1 [or any one of Claims 3 to 6], wherein n represents 1.

8. (Amended) A compound of formula I, as defined in Claim 1 [or any one of Claims 3 to 7], wherein B represents a structural fragment of formula IVa..

9. (Amended) A compound of formula I, as defined in [any one of the

preceding claims] claim 1, wherein the fragment



is in the S-configuration.

10. A compound as claimed in Claim 1 which is

- $\left[ (R)\text{-PhCH(CH}_2\text{OH)-C(O)-Aze-Pab;}\right.$
- $(S)\text{-PhCH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(R)\text{-3-methoxyphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(S)\text{-3-methoxyphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(R,S)\text{-3,4-dimethoxyphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(R)\text{-2-naphthyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(S)\text{-2-naphthyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(R)\text{-PhCH(CH}_2\text{OH)-C(O)-Aze-Pig;}$
- $(S)\text{-PhCH(CH}_2\text{OH)-C(O)-Aze-Pig;}$
- $(R,S)\text{-PhCH(CH}_2\text{OH)-C(O)-Pro-(R,S)-Hig;}$
- $\left[ (R)\text{-2,5-dimethoxyphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}\right.$
- $(S)\text{-2,5-dimethoxyphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}$
- $(S)\text{-3-methoxyphenyl-CH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $(R)\text{-3-methoxyphenyl-CH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $(R,S)\text{-3-aminophenyl-CH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $(R)\text{-3-(methylamino)phenyl-CH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $(S)\text{-3-(methylamino)phenyl-CH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $(S)\text{-PhCH(CH}_2\text{OH)-C(O)-Pro-Pab;}$
- $\left[ (R,S)\text{-3,5-dimethylphenyl-CH(CH}_2\text{OH)-C(O)-Aze-Pab;}\right]$

(*S*)-3-(trifluoromethyl)phenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3-(trifluoromethyl)phenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-3-hydroxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-((3-chloro-5-methylphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-((3-chloro-5-methylphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3-fluorophenyl-CH(CH<sub>2</sub>OH)CO-Pro-Pab;  
(*R*)-3-fluorophenyl-CH(CH<sub>2</sub>OH)CO-Pro-Pab;  
(*S*)-3-chlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3-chlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-3,5-dimethylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3,5-bis(trifluoromethyl)phenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3,5-bis(trifluoromethyl)phenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-3-methoxy-5-methylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-(2,5-dimethoxyphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-(3,5-dimethoxyphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-3,4-(methylenedioxyphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3-(2-naphthyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3-(2-naphthyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
[(*R,S*)-3,5-dimethoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;  
(*R,S*)-2-chloro-5-aminophenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;  
(*R*)-3-methylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;  
(*S*)-3-methylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;]  
(*R*)-2,5-dimethylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-2,5-dimethylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3-methoxy-4-hydroxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3-methoxy-4-hydroxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3,5-dichlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3,5-dichlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;

(*R*)-2,3-dimethoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-2,3-dimethoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-3-methoxy-5-chlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-3-methoxy-5-chlorophenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R*)-2-methyl-5-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*S*)-2-methyl-5-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab;  
(*R,S*)-Ph-C(Me)(CH<sub>2</sub>OMe)-C(O)-Pro-Pab;  
[(*R*)-2-chloro-3-methylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;  
(*S*)-2-chloro-3-methylphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab;]  
(*R*)-2,3-(methylenedioxyphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab; or  
(*S*)-2,3-(methylenedioxyphenyl)-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab; or  
(*R,S*)-Ph-C(Me)(CH<sub>2</sub>OMe)-C(O)-Aze-Pab;  
or a pharmaceutically acceptable salt thereof.

19. A compound as claimed in Claim 17 which is

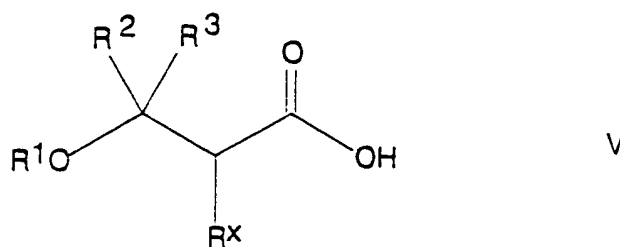
(*R,S*)-Ph-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OH;  
[(*R*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab-OH;  
(*S*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Aze-Pab-OH;]  
(*S*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)CO-Pro-Pab(Z);  
(*R*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)CO-Pro-Pab(Z);  
(*S*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OH;  
(*R*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OH;  
(*S*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OC(O)Et;  
(*R*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OC(O)Et;  
(*S*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OC(O)CH<sub>3</sub>;  
(*R*)-3-methoxyphenyl-CH(CH<sub>2</sub>OH)-C(O)-Pro-Pab-OC(O)CH<sub>3</sub>;  
(*R,S*)-3-Ph-C(Me)(CH<sub>2</sub>OMe)-C(O)-Pro-Pab(Z); or  
(*R,S*)-3-methylphenyl-CH(CH<sub>2</sub>OAc)-C(O)-Pro-Pab-OMe;  
or a pharmaceutically acceptable salt thereof.

20. (Amended) A pharmaceutical formulation including a compound as defined in [any one of Claims 1 to 19] claim 1, or a pharmaceutically acceptable salt thereof, in admixture with a pharmaceutically acceptable adjuvant, diluent or camer..

28. (Amended) A method of treatment of a condition where inhibition of thrombin is required which method comprises administration of a therapeutically effective amount of a compound as defined in [any one of Claims 1 to 19] claim 1, or a pharmaceutically acceptable salt thereof, to a person suffering from, or susceptible to, such a condition.

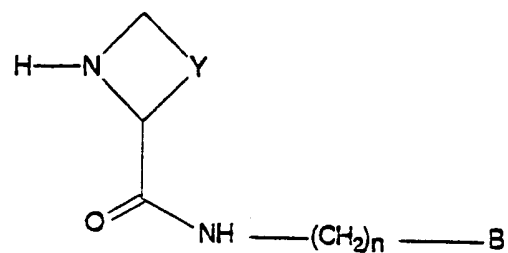
32. (Amended) A process for the preparation of compounds of formula I as defined in claim 1, which comprises:

(a) the coupling of a compound of formula V,



wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>x</sup> are as defined in Claim 1, with a compound of formula VI,

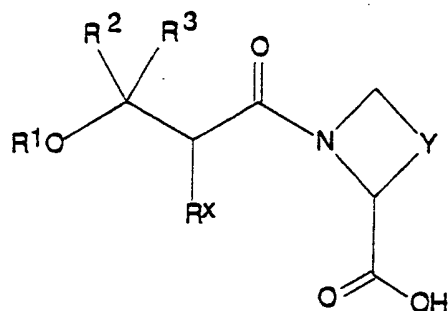




VI

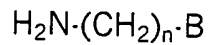
wherein Y, n and B are as defined in Claim 1; or

(b) the coupling of a compound of formula VII,



VII

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>x</sup> and Y are as defined in Claim 1 with a compound of formula VIII,



VIII

wherein n and B are as defined in Claim 1.

**REMARKS**

The present application is a continuation of application Serial No. 08/860,871, filed July 14, 1997, now allowed. The claims of the present application have been amended to improve their form. In addition, new Claim 33 has been presented for consideration.

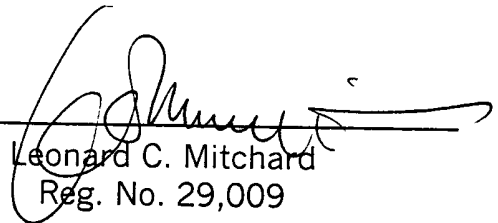
Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**Version With Markings To Show Changes Made.**"

Favorable action on this application is awaited.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By: \_\_\_\_\_

  
Leonard C. Mitchard  
Reg. No. 29,009

LCM:lks  
1100 North Glebe Road, 8th Floor  
Arlington, VA 22201-4714  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100